



**UNIVERSITI PUTRA MALAYSIA**

**INTERNET USAGE AND COMMUNICATION BEHAVIOUR AMONG  
ACADEMIC AND NON -ACADEMIC FEMALE STAFF IN THREE  
MALAYSIAN UNIVERSITIES**

**SYEDA TASMINA AHMED**

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**By**

**SYEDA TASMINA AHMED**

**Thesis Submitted in Fulfilment of the Requirement for the  
Degree of Doctor of Philosophy in The Faculty of  
Modern Languages and Communication  
Universiti Putra Malaysia**

**May 2001**



Dedicated to

My Parents to whom I owe my life

My daughter Lamia who sacrificed her comfort

My husband who made this thesis comes true

Abstract of the thesis presented to the Senate of Universiti Putra Malaysia  
in fulfilment of the requirement for the degree of Doctor of Philosophy

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**Chairman: Associate Professor Dr. Musa Abu Hassan**

**Faculty: Modern Languages and Communication**

In the Internet world the fastest growing audience is women. Apart from the limitless wonderment about the technical capabilities, the Internet has stimulated grave concern about its social impact as it is alleged to affect social relationships since Internet users are said to spend less time communicating with family and friends. Though Malaysia is a nation entering the information age with women constituting half of its population, no study has yet been done to investigate this issue. Therefore, this study was conducted specifically to determine (1) working women's communication behaviour at home and the workplace, (2) the differences in communication behaviour between female Internet users and non-users, (3) pattern of Internet usage among female Internet users, (4) changes in communication time at home and the workplace and the relationship between time spent for Internet and changes in time for communication, (5) the most effective demographic characteristics to

discriminate between Internet users and non-users; (6) reasons for not using Internet for the women who have Internet access. The study was conducted on the academic and non-academic staff in three universities in the Klang Valley. Responses from 327 subjects were finally used for the study.

Findings of the present study do not substantiate the fact that Internet users spend less time communicating at home or the workplace. Rather, compared to Internet non-users, they are found to spend more time communicating with children. In communication behaviour, differences between users and non-users were detected in communicating some topics and in usage of some modes of communication. For communication in personal or working life, there is no indication that time spent for Internet has any negative relation with the change in time spent for communication. However, time spent for Internet is found to be negatively related with the change in time for using some modes and media. Discriminant analysis shows that the three most effective demographic variables to differentiate between Internet users and non-users are education level, having studying children, and age. The variable, having studying children has been identified as a new discriminant demographic variable as compared to the characteristics of adopters in the existing technology adoption model. Pornography in Internet is the most frequently cited reason for not using the Internet.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia  
sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

**PENGUNAAN INTERNET DAN TINGKAH LAKU KOMUNIKASI  
DIKALANGAN WANITA AKADEMIK DAN BUKAN AKADEMIK DI TIGA  
UNIVERSITI DI MALAYSIA**

Oleh

**SYEDA TASMINA AHMED**

**Mei 2001**

**Pengerusi: Profesor Madya Dr. Musa Abu Hassan**

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Di dalam dunia Internet, pengguna yang semakin ramai ialah wanita. Selain dari kemampuan teknikal yang tidak terbatas, Internet telah menimbulkan kerisauan mengenai persoalan kesan sosial yang dibawa ke atas hubungan sosial memandangkan pengguna Internet mengurangkan masa untuk berkomunikasi dengan keluarga dan kawan-kawan. Walaupun Malaysia ialah sebuah negara yang memasuki era informasi dengan jumlah wanita yang separuh dari populasinya, masih belum terdapat kajian yang mengkaji isu ini. Oleh itu, kajian ini dijalankan untuk melihat (1) tingkahlaku komunikasi wanita bekerja di rumah dan di tempat kerja (2) perbezaan tingkahlaku komunikasi di antara pengguna dan bukan pengguna Internet wanita (3) pola penggunaan Internet di kalangan pengguna Internet wanita; (4) perubahan dari segi komunikasi

di rumah dan di tempat kerja dan hubungan di antara masa yang dihabiskan untuk Internet dan perhubungan dari segi masa untuk berkomunikasi, (5) faktor-faktor demografik yang paling berkesan untuk membezakan pengguna dan bukan pengguna Internet, dan akhir sekali (6) sebab-sebab tidak menggunakan Internet bagi wanita yang mempunyai akses Internet. Kajian dijalankan ke atas kakitangan akademik dan bukan akademik di tiga universiti di Lembah Kelang. Maklumbalas yang diperolehi dari 327 responden digunakan untuk kajian ini.

Hasil kajian tidak menyokong pernyataan bahawa pengguna-pengguna Internet kurang meluangkan masa untuk berkomunikasi di rumah dan di tempat kerja. Malah, berbanding dengan bukan pengguna Internet, pengguna-pengguna didapati meluangkan lebih masa berkomunikasi dengan anak-anak. Dari segi tingkahlaku komunikasi, perbezaan dikesan di antara pengguna dan bukan pengguna dari segi topik-topik perbualan dan penggunaan beberapa bentuk komunikasi. Dalam komunikasi peribadi atau bekerja tiada indikasi bahawa masa yang diluangkan untuk Internet mempunyai hubungan yang negatif dengan perubahan masa yang diluangkan untuk komunikasi. Namun begitu, dalam menggunakan bentuk-bentuk dan waktu media diluangkan untuk Internet, didapati perhubungan secara negatif dengan perubahan masa menggunakan bentuk atau media tersebut. Analisis diskriminasi

menunjukkan bahawa umur, tahap pendidikan dan pemilikan anak yang belajar merupakan variabel demografi yang paling berkesan untuk membezakan pengguna dengan bukan pengguna Internet. Mempunyai anak yang sedang belajar dikenalpasti sebagai satu variabel diskriminasi yang baru berbanding model adopsi teknologi yang sebelumnya. Analisis diskriminasi menunjukkan bahawa umur, tahap pendidikan dan pemilikan anak yang belajar merupakan variabel demografi yang paling berkesan untuk membezakan pengguna dengan bukan pengguna Internet. Mempunyai anak yang sedang belajar dikenalpasti sebagai satu variabel diskriminasi yang baru berbanding model adopsi teknologi yang sebelumnya. Pornografi dalam Internet dikenalpasti sebagai sebab utama untuk tidak menggunakan Internet.



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I certify that an Examination Committee met on 25th May 2001 to conduct the final examination of Syeda Tasmina Ahmed on her Doctor of Philosophy thesis entitled "Internet Usage and Communication Behaviour Among Academic and Non-academic Female Staff in Three Malaysian Universities" in accordance with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulation 1981. The Committee recommends that the candidate be awarded the relevant degree. Members of the Examination Committee are as follows:

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## DECLARATION

I hereby declare that the thesis is based on my original work except for quotations and citations, which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at UPM or other institutions.

Signed



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## **CHAPTER I**

### **INTRODUCTION**

Information technology (IT) has been identified as a strategic technology in Malaysia's development planning for enhancing the nation's stride to an information rich society. Malaysia has adopted a holistic approach to integrate information technology into the national development programmes under the Seventh Malaysia Plan (Government of Malaysia, 1996) in order to strengthen the basis for creating a knowledge based society and economy.

The Malaysian government's efforts towards the development of information and communication technology can be considered tremendous (Buyong & Iddid, 1999). In 1995, the Malaysian government approved computerisation projects totalling nearly RM (Ringgit Malaysia) 597 million, almost double the corresponding figure for 1994. This projects over 99 per cent growth whereas previously the annual growth rates recorded were in the region of 25 per cent (Hamid, 1995). The highest jump in IT expenditure reflects the Malaysian government's belief that the country would benefit in the long run as computers would help the nation to realise the vision of an information rich society.

In the IT world, the Internet is one of the fastest growing means of communication in history. With the Internet, more people have faster access to a greater amount of information than ever before. It offers an affordable and easy way to get information and also distribute information effectively (Holland, 1996, Madan, 1996, Suler, 1996, Young, 1996)

The Internet is full of information transactions, information is relayed every second, from news to reports, opinions, feedbacks and so on. It gives the user the ability to communicate instantly with thousands and thousands of people (Laquey, 1994). By using the Internet, people get access to databases, library catalogues, government and commercial services. The Internet applications are in the form of hypertext pages, which provide combined services such as text, audio, video, graphics, and animation. All this together has made it very rich in nature. As the new millennium sets in, the state of art in the field of information and communication technology (ICT) converged into one entity. The Internet, for example, has converged all communication media (Buyong & Idid, 1999)

Now, people who had never before touched a computer are spending hours surfing the Internet, catching up on the latest news and sports, trying out free programmes and games, exchanging opinions on countless topics, ordering items from their favourite catalogue, and more

It is a phenomenon that is sweeping the world. The Internet is a profound change in how people share and discover information (Gilster, 1995)

According to the Ipsos-Reid survey there were roughly 350 million adults online worldwide at the end of 2000 (eMarketer, 2001a). Recent estimates by IDC Research show that almost one billion people around the world will be using the Internet by 2005 (NUA, 2001). In the Internet world, the fastest growing audience are women. According to Jupiter Communications in 1998, 55 per cent of newcomers to the Internet in US were women (Flynn, 1999). In a joint report of American's access to technology tools the US Department of Commerce, Economics and Statistics Administration and National Telecommunications and Information Administration (2000) said that by August 2000 44.6 per cent men and 44.2 per cent of women were Internet users.

Apart from its limitless technical capabilities, the Internet has stimulated serious concern about its social impact. One area in particular has been singled out for comment, the way the Internet affects social relationships generally and participation in community life in particular (Wellman & Gulia, 1997). Kraut et al (1998a) in his study reports that because of using the Internet, people spend less time with family and friends.



### **Statement of the Research Problem**

The present era is characterised by the rising importance of information and knowledge in all spheres of human activity. Whether individual, personal or collective, access to information and knowledge has become essential for social and economic development. Realising this, Malaysia has made all out efforts to incorporate information technology into the national development programmes under the Seventh Malaysia Plan. Under the plan, the government allocated RM 2.3 billion (Government of Malaysia, 1996) to ministries and agencies to invest in IT related programmes and projects, including provision for the establishment of a national information infrastructure, training and installation of computer network to facilitate connectivity of the people. The increment of the Internet users in Malaysia can be called tremendous because by 2000 the number of users reached 1.32 million up from 0.25 million in 1998 (Hashim et al, 2000). A new eAsia report from eMarketer reveals that the Internet use in Asia Pacific region will soon account for 27 per cent of total online population by 2004 (eMarketer, 2001b).

The establishment of the knowledge society largely depends on information as raw material. Without a quick access, the process and redistribution of information, one cannot create a knowledge society. The Internet offers an affordable and quick way to get information and also